Subcommittee on Environment, Technology & Standards
Committee on Science
U.S. House of Representatives

HEARING CHARTER
Transportation Research & Development: Applications & Opportunities in the Denver Region
Friday, June 4, 2004
9:30 a.m. to 11:30 a.m.

Broomfield City Council Chambers
Broomfield Municipal Center
One Descombes Drive
Broomfield, CO 80020

Purpose

On Friday, June 4, 2004 at 9:30 a.m., the Subcommittee on Environment, Technology and Standards of the Committee on Science will hold a hearing on Transportation Issues in Colorado with a focus on the Region of Denver: Research Applications and Opportunities.

Every six years Congress authorizes expenditures for the nation's surface transportation projects. While the Transportation and Infrastructure Committee has primary jurisdiction over most of the programs in this area, the Committee on Science has oversight and legislative jurisdiction over the research, development and demonstration programs.

The R & D programs are in Title V of the transportation bill. Most of the funds for these programs are authorized for appropriation out of the highway trust fund ($468 million in FY03). There are seven broad categories of transportation R & D: 1) Surface Transportation Research; 2) Technology Deployment; 3) Training and Education; 4) Bureau of Transportation Statistics; 5) Intelligent Transportation Systems (ITS) Standards, Research, Operational Tests, and Development; 6) ITS Deployment; and 7) University Transportation Research.

Table 1. Research Organizations and their general purpose and focus.

Research Organization	Time Horizon	Type of Work	Geographic Scope
Federal Highway Adm.	Medium to Long	Broad disciplinary focus on issues of national concern	Regional to National
National Cooperative Highway Research Program	Medium to Long	Broad disciplinary focus on regional and multi-state issues	Regional
State DOT	Short	Applied focus on state operational needs including focus on technology transfer	State
University Transportation Centers	Project dependent – could be short, medium or long	Independent and cooperative research; focus on training; mix of applied and basic research	Mixed
Strategic Highway Research	Short to Medium	Focused on specific, well-	Regional to National

Program (SHRP & F-SHRP)		defined list of applied research needs	

Transportation Issues in the Denver Region

Between 1985 and 1995, traffic on Colorado's highways, particularly on the interstate highways, increased by 43 percent. By 2000, the Texas Transportation Institute ranked the Denver area the seventh most congested metropolitan area in the country. The interchange at I-25 and I-225 in the southeast corridor was ranked the 14th busiest in the nation.

The area known as the southeast corridor connects two major centers of employment in Denver, the Denver Central Business District (downtown) and the Southeast Business District which includes the Denver Tech Center. The Denver Tech Center developed in the early 1980s continued to expand and to encourage other development in the area south of Denver. Over the past decade the southeast area of Denver has been among the fastest growing areas in the country. Growth in the outlying communities surrounding Denver has also been substantial. While this has brought many benefits, traffic congestion and delays have increased and as in other areas, vehicle miles traveled has grown faster than population.

Communities in the mountains have expanded along with their tourism-based economies. Skiing, golfing, hiking and other outdoor recreational activities have drawn increased numbers of tourists and year-round residents to these communities. The major route connecting tourists to these resort areas is I-70 which has become increasingly congested over the past decade. In addition, when snowstorms, avalanches, rock slides or accidents occur along I-70 – which happens frequently – this arterial shuts down for hours, dramatically impacting the economy of Colorado's western communities as well as the movement of interstate commerce.

The desire to maintain the environmental amenities that draw people to the region and the need to maintain mobility of people, goods and services is placing an increasing strain on the current transportation system. This is leading communities in these areas to look at multimodal solutions to their transportation problems. These include expansion of existing interstate capacity, expansion of mass transit, and increased bicycle and pedestrian networks.

Current transportation projects in the Denver area include the Transportation Expansion Project (TREX) and the Downtown Multimodal Access Plan (DMAP).

The TREX project began construction in 2001 and will be completed in 2006. The project is located in the southeast corridor. TREX is a multimodal project that includes widening of Interstate 25, the major north-south route through Denver, and a light rail line. The project requires cooperation between CDOT which is responsible for the highway widening portion of the project, DCOG the metropolitan planning organization for Denver, and the Regional Transportation District (RTD) which is responsible for the light rail portion of the project. The TREX project is funded through several sources including federal transportation funds provided to Colorado.

The Downtown Multimodal Access Plan is a new project of the Department of Public Works. The 25-year plan will include proposals for vehicular, pedestrian, bicycle and rail access into and throughout Downtown Denver. It will also include long-term land-use planning, infrastructure and other elements that will connect downtown Denver to the adjacent communities. DRCOG, CDOT, and RTD are all involved in this planning exercise with the city and county of Denver.

Witnesses: Their Backgrounds and Institutions

Mr. William Vidal, Manager of Public Works – Denver:

Mr. Vidal is the current Manager of the Department of Public Works for the City and County of Denver. Prior to his current position he served as Executive Director for the Denver Regional Council of Governments. Mr. Vidal also served as the Director of the Colorado Department of Transportation (CDOT) under Governor Roy Romer.

The Department of Public Works is responsible for all road maintenance and repair and for waste management and storm drainage systems in the city and county of Denver. The Department manages design and construction of streets, bridges, and public buildings. Transportation services include parking management, transportation planning, and engineering.

The Denver Council of Regional Governments (DRCOG) is the metropolitan planning organization for the Denver region. It is a voluntary association of 50 county and municipal governments in the Denver area. Member counties include Adams, Arapahoe, Jefferson, Gilpin, Clear Creek, Broomfield, Boulder, Douglas, and Denver. DRCOG address issues including growth and development, transportation, services for senior citizens, environmental issues, and performs analyses of economic and development trends.

The Colorado Department of Transportation is responsible for the 9,142 miles of highway throughout the state of Colorado. Ten percent of these highway miles are part of the Interstate highway system, but they account for forty percent of the highway travel in Colorado. CDOT also supports aviation throughout the state with grants to local airports through the Division of Aeronautics. CDOT's Transit unit assists the transit systems throughout the state.

Mr. Vidal will provide an overview of transportation issues in Colorado with a focus on challenges in the Denver region. He will discuss the linkage between the state and federal transportation research and development enterprises and the application of transportation research to conditions in Colorado.

Mr. Jayson Luber, 850 KOA Helicopter News/Traffic Reporter:

Mr. Luber has served as the Helicopter News/Traffic Reporter for the Denver radio station, 850 KOA since May of 2001. Mr. Luber reports on traffic conditions in the Denver area to commuters during the morning and afternoon. Mr. Luber also reports for 9NEWS, the National Broadcasting Corporation affiliate in the Denver area.

Mr. Luber will discuss the areas with recurring traffic problems in the Denver region and the factors that contribute to traffic delays during commuting times.

Mr. Carlos Hernandez, Charlier Associates:

Mr. Hernandez is a transportation planner who has worked for Charlier Associates since 1998. Mr. Hernandez has experience in local and regional multimodal transportation planning projects with expertise in transportation plan development, multimodal transportation integration, trail design, and GIS development.

Mr. Hernandez has worked on a variety of projects in Colorado including: mapping of existing bicycle facilities in the US 36 corridor to identify gaps in the existing trail system and conducting a peer study for the Colorado Department of Transportation to evaluate the relationship between land use patterns and passenger rail systems.

Charlier Associates, Inc. is a multimodal transportation planning firm that has been based in Boulder, CO since 1993. Charlier specializes in the use of innovative approaches to improving mobility. Their clients include states, towns, cities, counties, regional agencies and transit service providers. Charlier has worked extensively with medium-sized cities to develop transportation programs that address the specialized needs of mountain communities with tourism-based economies.

Mr. Hernandez will discuss the transportation issues Charlier Associates' clients have hired them to address. He will also identify areas of research needed to better enable his firm to address the transportation challenges identified by his clients.

Dr. JoAnn Silverstein

Dr. Silverstein is the Chair of the Department of Civil, Environmental & Architectural Engineering at the University of Colorado. Dr. Silverstein is a civil engineer with expertise in environmental engineering. The Department has considerable experience doing research on transportation systems. Over the past five years, the Department has done over 50 independent projects. They have been funded at approximately $1.5 million per year over this time period.

Currently the University is developing a proposal for a Center For Applied Integrative Research in Transportation. The Center would bring together resident researchers, professors, and special outside experts to work on surface transportation issues in partnership with local government and industry. The broad themes the Center would address include: Transportation Security, Infrastructure Safety and Maintenance, and People, Energy, and Environmental Sustainability.

Dr. Silverstein will discuss the past and present transportation research and development at the University of Colorado and the proposal for the new transportation research center.